WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
DESIGN-BUILD PILOT PROJECT EVALUATION:
INTERIM REPORT – POQ/BAFP EVALUATION

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DESIGN-BUILD PILOT PROJECT EVALUATION: INTERIM REPORT – POQ AND BAFP EVALUATION

Executive Summary

This report is an evaluation of the Washington State Department of Transportation's (WSDOT) Design-Build (DB) Pilot Project at the SR 500 Thurston Way Interchange in Vancouver, WA. Specifically, the report evaluates the design-builder selection process for both the Proposal of Qualifications (POQ) and the Best and Final Proposal (BAFP).

Although many lessons were learned on this first DB selection process, all stakeholders agreed that the process was generally fair, unbiased and most importantly, delivered value to WSDOT. All participants contacted in this evaluation, both WSDOT employees and design-builders, stated that they think the DB process has a place in the delivery of transportation projects for the State of Washington. The suggested improvements stand to advance the level of value delivered on future DB projects.

WSDOT DB Selection Process

WSDOT is currently employing a two-phase procedure for the selection of design-builders as recommended by the Design-Build Institute of America (DBIA) and the US Federal Acquisitions Regulations (USFAR). The two-phase process consists of a pre-qualification of design-builders who excel in the criteria set forth in the Request for Qualifications (RFQ). A final selection is then based on the review and evaluation of each proposer's BAFP, which is a response to the Request for Proposal (RFP) sent to each pre-qualified design-builder. During the first phase of this process, the proposing design-builders' experiences, quality control programs, safety programs and understanding of the project are evaluated, thus creating a short-list of competitive design-builders who are best qualified to deliver the project. During the second phase, the proposers submit a BAFP. This BAFP is a performance-based set of preliminary design documents defining all aspects of the project.

Specifically for the Thurston Way Interchange, WSDOT chose to evaluate three primary design and construction categories in the BAFP: Management & Organization, Schedule, and Technical Solutions. The WSDOT evaluation team was organized into a hierarchical structure with a Selection Official, a Proposal Evaluation Board (PEB) consisting of five (5) members, and a Technical Evaluation Board (TEB) consisting of approximately fifteen (15) technical teams with approximately thirty (30) individual technical specialists. Based on the cumulative effort of these teams, the final design-builder was selected. The scope of this report is to provide an objective review of WSDOT's design-builder selection process.

Determination of the benefits and concerns of this selection process provides a basis for improving both phases of design-builder selection. The evaluation consisted of real-time data collection in parallel with the Thurston Way Interchange project in Vancouver, WA. Data collection during the pre-qualification stage was qualitative in nature employing two

primary methods: *questionnaires* and *interviews.* For evaluation for the POQ phase, questionnaire and interview respondents included non-participating design-builders, design-builders participating but not short-listed, and internal WSDOT reviewing committees. The data collection gathered insights from all stakeholders concerned with the DB process. The professionals who were not chosen for the second stage of selection were able to provide unique insights into specific aspects of the process that the short-listed companies may not have been aware of, and vice-versa. The evaluation of the second phase of the selection process followed in similar fashion. Using *interviews*, the independent evaluation team collected qualitative data with respect to the selection of the final design-builder. This group of interviewees consisted of the internal Technical Evaluation Teams (TET) from WSDOT, along with the Proposal Evaluation Board (PEB), the successful proposer, and the two unsuccessful proposers.

POQ Evaluation Summary

Although the majority of the respondent firms and professionals within WSDOT believe that DB has a place in the public transportation sector and that WSDOT should participate in DB projects, several issues concerning the pre-qualification process were consistently mentioned in both interviews and questionnaires as possible areas of improvement. The issues of concern and suggested corrective actions are listed below.

Issue of Concern	Suggested Action
RFQ clarity and interpretation	Focus on RFQ clarity, length, and point weighting for better interpretation
WSDOT/design-builder interface	Increase offeror interaction with WSDOT through a common point of contact
Selection point weighting and scales	Re-evaluate overall point distribution, set minimum acceptable score, and more consistent standard deviations between evaluators
Quality control/quality assurance (QA/QC) requirements	Clarify WSDOT involvement in the QA/QC program
Financial statement requirements	Allow more flexible and region-specific financial statement requirements
Design-builder past performance	Create a DB specific experience database to objectively and consistently evaluate relevant experience
Scoring team experience	Provide consistent training for the diverse set of WSDOT evaluators and only have evaluators score their own area of expertise

BAFP Evaluation Summary

Similarly, the BAFP process was reviewed and the common stakeholder concerns are summarized below.

Issue of Concern	Suggested Action
Overly prescriptive RFP requirements may have inhibited innovation in design	Provide the opportunity for more innovation by decreasing prescriptive design in the RFP and increasing the use of performance requirements
Communication of design issues	Allow more opportunity for proposers to ask additional questions and mass WSDOT resources to quickly answer questions during the proposal response period
Point distribution and impact of scoring differential	Publish evaluation point distribution to a greater level of detail and establish a more uniform and transparent system for assigning evaluation points
TET interpretation of RFP	Have TET members write, or carefully review, their respective portions of RFP
TET and PEB education and training	Improve and emphasize importance of training sessions
Amount of stipends	Reward each proposing DB team with 1/3 of the total auditable design hours
Use of warranties	Reconsider pavement warranties as it may not be cost effective on this project
TET scheduling	Organize workload of TET members so that evaluations could be better integrated into their schedules
WSDOT/design-builder interface	Increase offeror interaction with WSDOT through a common point of contact

The stakeholders also consistently noted a number of issues that positively influenced the final selection process.

- The RFP was written with sufficient detail to provide fair comparisons and prevent any submittals from being classified as non-responsive.
- The time allotted for evaluations was adequate.
- The use of teamwork on the TET to review proposals was extremely beneficial.
- The knowledge and expertise of TET members was a strong benefit to the process as a whole.

Table of Contents

Introduction

This is an interim progress report for the Washington State Department of Transportation (WSDOT) Design-Build (DB) Pilot Program Evaluation. This report is an evaluation of the design-builder selection process for the SR 500 Thurston Way Interchange pilot project. The Washington State Legislature first authorized approval for this pilot program in 1998 under Substitute Senate Bill (SSB) 6439. WSDOT has contracted with Dr. Keith Molenaar of the University of Colorado to provide an independent evaluation of the WSDOT DB Pilot Process. The ultimate goal of this independent evaluation is to determine the level of effectiveness achieved by the DB process for the State of Washington. Additionally, the evaluation will provide lessons learned to assist WSDOT in their goal of continuous improvement.

WSDOT is employing a two-phase selection process in its DB guidelines. This two-phase system utilizes a pre-qualification stage, in which the potential design builders submit their Proposal of Qualifications (POQ). This phase serves to pre-qualify potential design-builders to the three to five most competitive firms. The second phase includes submission and evaluation of the Best and Final Proposals (BAFP). The BAFPs include substantial design effort and the unsuccessful offerors are compensated for their proposal. Final award is based on a best value selection through a combination of price and technical proposals. The scope of this report encompasses evaluation of both the initial pre-qualification phase of the process as well as the final selection phase.

DB is an alternative project delivery method that encompasses both project design and construction under one contract. One firm, or team, is contracted for a project in its entirety. DB contracts take on many different forms, but the key element is a single source of responsibility for the owner through one contract for both design and construction. There are numerous reasons why owners choose to use DB, but the primary reason is the potential for shortened project duration. Because of the coordinated efforts between the designers and the builders, construction can begin prior to completion of construction documents. Using DB also has the potential to reduce the overall costs associated with design and construction. Two recent studies of over 600 projects in the building sector have demonstrated a 30% or better increase in project delivery speed and 6% or greater reduction in unit cost over the design-bid-build method of project delivery (Bennet 1996; “Project” 1998).

Recently, DB has gained acceptance for transportation projects, and has been used on a wide variety of projects, from bridges to automated traffic management systems and from new freeways to reconstruction of decaying roads. The Utah I-15 reconstruction, the Transportation Corridor Agencies in California, the E-470 project in Colorado and numerous other DB “mega projects” have captured the attention of the transportation community (Warne and Downs, 1999). Although smaller DB projects have not gained the notoriety of the “mega projects”, the Federal Highway Administration (FHWA) has approved DB on over 100 smaller projects since 1988 under Special Experimental Project No. 14 (“FHWA” 1998). SEP-14 was implemented to compile information and evaluate innovative contracting practices by agencies in the United States as well as

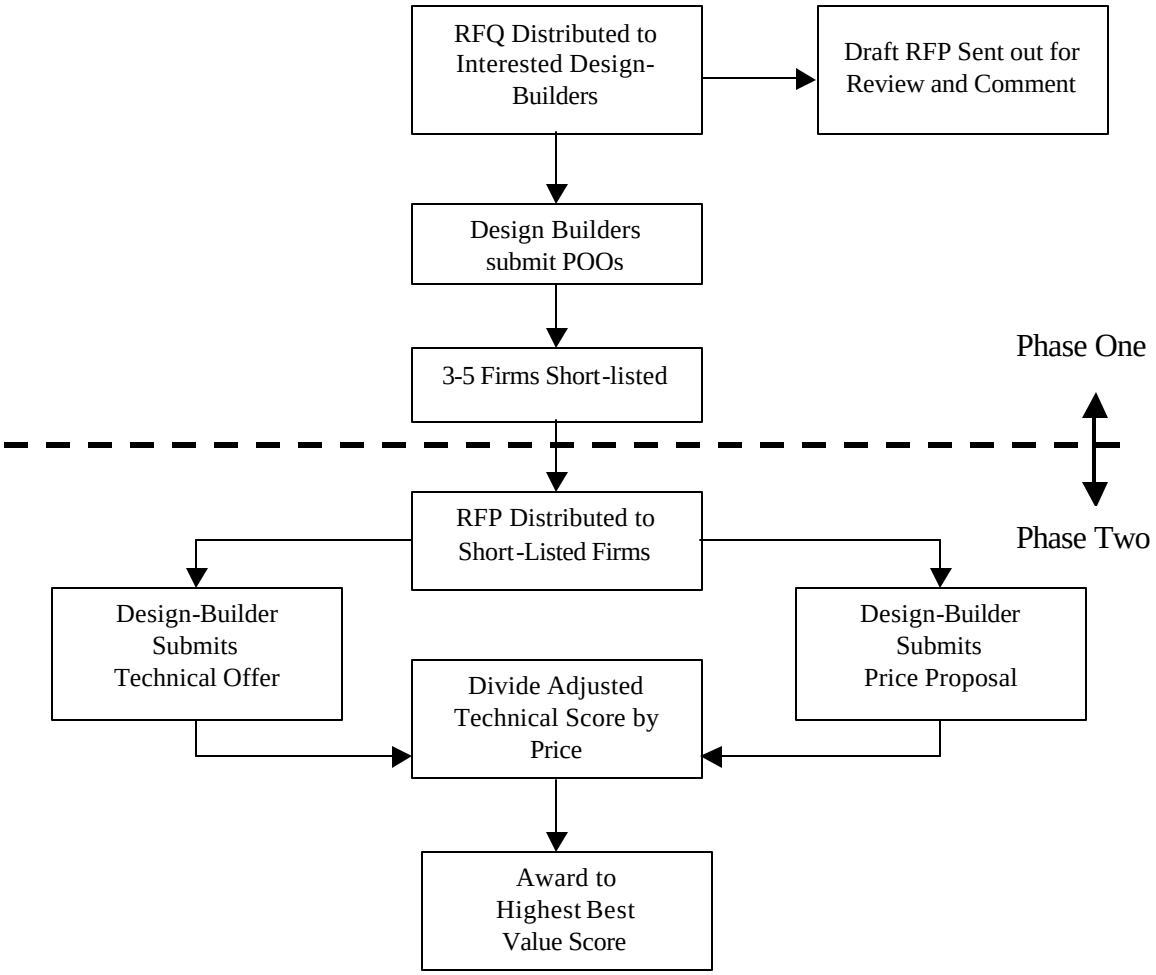
internationally. DB is one of the experimental practices evaluated under SEP-14. The potential for savings in the transportation sector was demonstrated in a 1996 Federal Highway Administration Report experience with SEP-14. The report showed that in Florida, a state that has been experimenting with DB since 1983, that a 40% savings in time was shown with no significant change in cost ("Design-Build" 1996).

WSDOT Two-Phase Design-Build Selection Process

In the standard WSDOT two-phase DB selection process, firms first respond to an advertisement of the project; the responding companies are sent a Request for Qualifications (RFQ) to establish the firm's ability to deliver the project. The interested firms return a Proposal of Qualifications (POQ) outlining their experience and capability to perform the project. Three to five of those firms that are deemed most competitive are placed on a short-list and sent a Request for Proposal (RFP). This RFP outlines the project in more detail than the RFQ, and asks each proposer to submit a Best and Final Proposal (BAFP). These BAFPs are design and construction documents that typically contain approximately 30% design documentation. Technical Evaluation Teams (TET) within WSDOT evaluate each submitted design. Using a combination of the TET score and bid price, a "best value" score is produced for each BAFP. WSDOT used the following equation to determine a best value score for the Thurston Way Interchange:

Best Value Score = (Technical Score x 10,000) / (Lump Sum Bid Price)

The following figure outlines the two-phase selection process utilized by WSDOT.



The necessity for a two-phase DB process is two-fold. First, because the state is procuring both design and construction services, it is not appropriate to utilize a fixed price bid. Historically, designers are selected on qualifications basis and constructors are selected on price. When these two professionals are selected as one entity, the public sector selection method of choice is some type of "best value" selection as described above. Second, because there is substantial design effort and cost associated with the preparation of a DB proposal, a two-phase procedure allows only the most competitive design-builders to incur the cost of proposal preparation. The unsuccessful proposers are then offered a "stipend" to partially compensate them for their design effort. The pre-qualification keeps the proposal and evaluation costs to a minimum for both the design-builders and WSDOT.

The selection process used to identify the design-builder of record is one of the most critical aspects in the public sector DB process. A poorly executed selection process adversely affects project duration, project cost, project quality and design-builder participation. A well executed selection process is fair, equitable, and results in the best value to the public.

WSDOT Pilot Project

The project being evaluated in this report is the SR 500 Thurston Way Interchange in Vancouver, WA. Amy Revis is the project manager for WSDOT. This project is a redevelopment of the "at grade" interchange of SR 500 and Thurston Way located in the southwest region of WSDOT. The project lies between the SR 500 Andersen Road Interchange and the SR 500 I-205 Interchange, in a tight corridor that creates many opportunities for innovative approaches to the logistical transportation concerns of the area. Traffic volumes on the mainline, the proximity of the main entrance to Vancouver Mall and another plaza on the south side, along with challenging weave requirements will make this demanding for traffic control. As of March 2001, the project has completed both phases of the two-phase design-builder selection process, which entails the pre-qualification of design-build firms and the final selection.

Phase One: Pre-qualification Selection

The scoring of the POQ was based on five factors that helped determine the capacity of the submitting contractors to do the specified work. Each of the sections was scored individually on a predetermined scale by all five of the WSDOT reviewing team members. The five categories scored were:

1. Project Understanding & Approach (250 Points)

In the project understanding and approach section, submitting teams were asked to discuss issues regarding project specific tasks, traffic control, community relations, scheduling and partnering. Specific issues to be addressed are listed below.

Project Tasks

- General tasks involved in the project
- Special issues or problems that are likely to be encountered
- Understanding of the technical and institutional elements to be addressed by the proposer to achieve completion of the project

Traffic Control

- Understanding of traffic control required for the project
- Impact of traffic control on the schedule
- Traffic issues particular to the selected solution

Community Relations

- Key community relations issues and the manner in which they will be addressed

Partnering

- Understanding of partnering its implementation regarding specific tasks and issues

Criteria for WSDOT Evaluation

- Major tasks
- Potential Risk Factors
- Issues: safety, traffic staging and control, failure of team member, partnering, current environmental regulations
- Key issues affecting schedule are identified and realistic

2. Project Team, Key Personnel & Processes (250 Points)

In the key personnel and processes section, the submitting teams were required to outline the organizational structure of their team, describe teaming arrangements, identify key personnel as well as equipment and resources necessary to complete the project, discuss the impact that the project will have on the workload of the office and the methods the proposer will utilize to resolve legal issues. The key personnel to be identified in this section are listed below.

Design-Build Project Manager

- Responsible for ensuring personnel and other resources are made available for the project
- Handle contract administration matters
- Ultimately responsible for the quality and timeliness of proposer's performance

Design Project Manager

- Active manager of the design of the project

Construction Project Manager

- Active manager of the construction of the project

Quality System Manager

- Active manager of Quality Control/Quality Assurance program for the project

Project Engineer(s) and/or Other Key Personnel

- Other key members of the project team including sub-consultants/ subcontractors that provide special expertise or will perform key tasks

As well as describing the individual qualifications of the team members, proposers were also required to discuss concurrent projects performed by team members, as well as past work with WSDOT.

Criteria for WSDOT Evaluation

- Proposers organizational chart and delineation of structure and relationships between members of the proposing team
- Proposers financial statements, staffing, equipment and other resources demonstrate the ability to carry out the project as described
- Key personnel demonstrate specific relevant on DB projects and similar non DB projects
- Key personnel's relevant experience is at the appropriate level
- Key members of the team possess unique qualifications required of the project
- Key personnel demonstrate specific relevant experience on WSDOT projects

3. Past Performance (300 Points)

The past performance section of the POQ examines relevant projects completed by the teams in the past, as well as their performance on those jobs. The required information is listed below.

Required Criteria:

- Past five projects completed by the proposer member firms
- Discuss relevant experience of the proposer member firms
- Describe total project costs, value of change orders and claims on each project
- Describe permit violations and environmental regulation violations
- Provide projects completed ahead of schedule and/or below budget and how this was accomplished
- Describe experience in developing information for acquiring permits for similar projects and compliance with permit conditions and environmental regulations

Criteria for WSDOT Evaluation

- Firms have demonstrated organizational and management capability to deliver similar projects using DB contracting
- Firms have demonstrated organizational and management capability, working individually or as a team, to deliver similar projects, using methods other than DB
- Firms have demonstrated a history of resolving disputes without litigation, termination for cause, or liquidated damages
- Firms have demonstrated a history of completing similar projects with little or no cost or schedule growth, including experience with mechanisms to avoid delays and minimize claims
- Firms have demonstrated a history of meeting regulatory requirements without permit violations

4. Quality Control/Quality Assurance (100 Points)

In the QA/QC portion of the POQ, firms are required to identify internal QA/QC policies and procedures as well as how their program would enhance the development of the project.

Criteria for WSDOT Evaluation

- The experience of design and construction QC/QA managers are sufficient to perform the tasks of overseeing design and construction QA/QC
- Firms demonstrate QC/QA procedures for both design and construction that are proactive in providing a quality product

5. Safety Program (100 Points)

The safety program section of the POQ requests that the teams provide a brief overview of their safety program, as well as a five-year history of their safety record on all projects. In addition, the teams must submit the resume of their safety officer.

Criteria for WSDOT Evaluation

- Firms have an established and effective safety program
- Firms have a minimum of lost time accidents
- Firm's safety officer's experience is adequate to manage the safety program for the project

Phase One: Data Collection

Stakeholders participating in this DB Pilot Program selection process provided input from the Washington engineering and construction communities. The data collection during the pre-qualification stage was qualitative in nature and the two major methods employed were *questionnaires* and *interviews*. Questionnaires were mailed to firms as a survey to be completed and returned. Interviews were conducted over the phone and in many cases were conference calls involving more than one member of a specific stakeholder. At this stage, questionnaire and interview respondents included non-participating design-builders, design-builders participating but not short-listed and internal WSDOT reviewing committees.

Non-Participant Questionnaires

Non-Participant teams were those that expressed interest in the project, but did not submit a POQ. The respondents to the questionnaires included a wide variety of construction professionals consisting of design/engineering firms, construction management firms and general contractors. Each group's response included valuable information pertaining to how DB affected their specific discipline as well as suggestions as to how to improve the pre-qualification process and increase project participation.

WSDOT POQ Scoring Team Interviews

The POQ scoring team consisted of five WSDOT members with a variety of construction and design backgrounds. Interviews with the WSDOT POQ scoring team following the short-listing of the top three firms provided insight into the scoring process as well as each WSDOT team member's approach to scoring the submittals. This information is extremely valuable when evaluating the DB pre-qualification process from an administrative perspective.

DB Teams Not Short-Listed

The non-short-listed stakeholder group consisted of the three firms that were not selected to continue their design development. Interviews with submitting teams that were not short-listed provided valuable information about the pre-qualification process from the perspective of those in competition for the project. These interviews not only brought forth issues that teams had with the content and scoring of the POQ, but also included suggestions as to how to improve the pre-qualification stage to achieve submittals that are higher in quality and more concise.

This range of stakeholders provided a broad range of unique perspectives of the pre-qualification stage. The data collected provides information regarding time, quality and management issues. Such information also yields valuable insights into factors including

design-builder preparation, department of transportation work leveling, DB pre-proposal planning, and issues of scoring subjective portions of the proposal of qualifications. Determination of the benefits and concerns of the pre-qualification processes provides a basis for improving this first phase of selection and increases the chances of success for the this innovative delivery method. Questionnaire forms and interview questions are located in Appendix A. A list of the interviewees and their contact information are included in Appendices B & C. Individual answers are available upon request.

Phase One: Lessons Learned & Recommendations

Each stakeholder group provided valuable input about what they thought was beneficial, as well as areas of the pre-qualification process can be improved. Although the majority of the firms express that they believe that DB has a place in the public transportation sector, and that WSDOT should participate in DB projects, several issues concerning the pre-qualification process were consistently mentioned in both interviews and questionnaires as possible areas of improvement. Issues such as RFQ clarity, WSDOT-design-builder interface, point weighting and scales, QA/QC, financial statements, scoring team experience, design-builder past performances, and team financial strength were mentioned most often.

1. RFQ Clarity and Interpretation

RFQ clarity was addressed by the majority of the non-participating respondents as an issue that deterred them from participating in this project. Respondents consistently questioned exactly what WSDOT wanted in the POQ submittal.

The clarity of the RFQ document proved to be the biggest problem for the submitting teams not short-listed. Misunderstandings about subject matter and length were both problem areas that the teams felt adversely affected their score. These respondents also expressed that the RFQ document could have been more definitive in how each section was scored, not just the number of points available. An example of this misunderstanding is in the safety program portion of the RFQ. One DB team outlined their company's safety program and safety record, where the RFQ scoring was based on the design-builder's safety program for this specific project.

- Focus on RFQ clarity, length, and point weighting so that its requirements are more definitive. This will improve initial design builder participation, while also increasing the quality of POQ submittals.

2. WSDOT/Design Builder Interface

An issue that the submitting teams feel strongly about is the lack of interface between WSDOT and the submitting design-builder. They felt that many of the issues of confusion could have been clarified if they were allowed to ask more questions.

- More information should be provided to design-builders regarding a point of contact within WSDOT that they can contact with questions. This should remain a single

point of contact within WSDOT so that any new information can be communicated to all DB teams equitably.

3. Selection Point Weighting and Scales

WSDOT team members consistently mentioned concern over the weighting of points in specific portions of the POQ scoring. An example of this is the weight given to the *project understanding* portion of the RFQ. Most members agreed that this type of information is not as pertinent as each design-builder's past performance and/or team organization during the pre-qualification process.

The majority of the scoring team members also expressed concern over the lack of an accepted average score for each section and what types of requirements would be accepted as average or minimum. This was also an issue during the final short-listing, when a consensus on the scores was needed to decide which teams would continue on the project. An accepted scoring average would provide a basis from which the scores could be compared.

- In order for the scoring system to be truly effective, the scoring of the submitted POQs needs to be systematic in nature and homogeneous across all sub-criteria. Re-evaluate the pre-qualification criteria point weightings and revise them to clearly convey and achieve project goals. To achieve a more consistent and comparable scoring range during the POQ evaluation, a scoring minimum and/or average should be established and communicated to each individual WSDOT evaluation team member. Prior to review, team meetings should be held to establish which criteria make up this minimum score, and which should be rewarded more points.

4. Quality Control/Quality Assurance (QA/QC) Requirements

Most of the non-participating teams had problems finding or selecting firms to do QA/QC. Some firms cited the stringent requirements, while others simply could not find QA/QC firms that were interested in the project.

- WSDOT must clearly and concisely state the QA/QC requirements in the RFQ. If more DB firms are desired, more flexible RFQ QA/QC requirements could increase initial participation. Responsibility for QA/QC monitoring has shifted substantially from WSDOT to the DB teams, thus creating a need for new internal and external QA/QC activities on behalf of the design-builders. With increased DB activity in the public transportation sector, these new QA/QC roles will become more commonplace, but for the first few DB projects, WSDOT should solicit feedback from the regional contractors, designers and QA/QC firms on each project to ensure that they are achieving full participation.

5. Financial Statement Requirements

Financial statements also caused considerable concern among a few of the non-participating firms. One firm in particular found the amount of time given to submit the POQ inadequate in order to prepare such an in-depth financial statement. Others agreed that only large firms have financial statements done regularly and therefore it is

unreasonable to make such a request on a smaller firm to submit this type of information over such a short period.

- More flexible financial statement requirements could increase design-builder participation by decreasing the detail required from proposers, thus allowing smaller "up and coming" firms to participate. It should also be required that larger firms who have subsidiaries in the region in which the work is to be performed need to submit that particular offices' financial statements, and not the firms national/international financial information. Longer RFQ advertisement periods will allow proposers more time to prepare such statements.

6. Design-Builder Past Performance

During the scoring process it appeared that each team member explored the past performance of the submitting teams to a different degree. Some members took an active role in calling references and researching the teams past performances in WSDOT records, while others relied more on their personal experiences with the teams. It was reported by the design-builders that WSDOT evaluation team members' past experience or knowledge of the DB teams may have biased their individual opinion. Such discrepancy in the research of past performance led to similar discrepancies in scoring.

- WSDOT should create a centralized, DB specific experience database to objectively and consistently evaluate relevant experience. Until that database is created, a third party, perhaps another region within WSDOT, should conduct past performance research and report to the scoring team on their findings, thus each evaluator can make a judgement based on the same information.

7. Scoring Team Experience

Another issue mentioned frequently from the WSDOT POQ scoring teams was the individual experiences and expertise of each team member. While the scoring team was diverse in backgrounds ranging from construction to design, concern was expressed over the ability of some individuals with little or no experience in a particular field to score a submitting team accurately in that area.

- In order to more effectively evaluate the POQs, the scoring teams should be organized to obtain a higher correlation between the individual evaluator's professional specialty and the area of the POQ which they are scoring. In addition, pre-scoring training as to what types of solutions would be scored higher by an expert in the field could be beneficial to the POQ scoring.

8. Team Financial Strength

Another issue that concerned the teams not short-listed was WSDOT's scoring of the teams financial strength. They felt that WSDOT underestimated this area of critical importance. One interviewee cited that one of the selected teams would not have bonding capacity had the job been performed as a traditional design-bid-build.

- Reconsider the method for determining the financial strength of proposers as a function of their past work and financial history in the design-build environment.

Phase Two: Final Design-Builder Selection

The scoring of the BAFP was based on three main factors that helped determine the capacity of the submitting design-builders to perform the work. The sections were scored by either an individual or a team of professionals within WSDOT, depending on the complexity of the section. Using a predetermined set of criteria standards, the Technical Evaluation Teams (TET) produced a score for each of the short-listed companies. While the RFP contained the hierarchy of points possible (seen in parenthesis) for each section, the breakdown of points within those sections was not included. The technical evaluation sections are listed below.

1. Management and Organization (100 Points)

In the management and organization section, the proposing design-builders were asked to provide an explanation of their approach to project management and the capabilities to provide the personnel, facilities, and equipment to complete the project.

Organization Narrative and Charts

- Outline key personnel to be active on project
- Show interrelationships of project management, designers, constructors, etc.

Management Controls

- Outline management system to be used
- Narratives of how DB will reschedule certain activities
- Narratives of how DB will integrate subcontractor and subconsultant activities into its scheduling and reporting system

Design Management

- Concept of design management
- Description of work under proposer's direct labor force
- Coordination of utilities, traffic maintenance, community relations, etc.

Construction Management

- Plan for construction of project
- Construction organization chart
- Description of all categories of labor work, both in-house and subcontracted

Quality Management Program

- Comprehensive QA/QC plan which covers responsibilities for both the design and construction phases

Coordination with Other Agencies

- Description of the plan to coordinate with Federal, State and Local agencies

Public Relations

- Plans for dealing with public information

Safety

- Project safety plan
- Identify key person in charge of safety plan
- Describe how plan will be integrated into project
- Summarize plan for public safety

2. Schedule (100 Points)

The schedule section asked the proposing design-builders to prepare a full set of preliminary schedules, covering all major activities and scheduling aspects of the project.

Narrative

- Description of proposer's critical path schedule
- Project phases and major activities
- Description of interrelationships between the phases and major activities

Chart

- Preliminary schedule showing phases of project
- Construction sequencing
- Show timing of phases, and activities for engineering, construction and maintenance during construction

3. Technical Solutions (800 Points Total)

In order to best represent all technical aspects of the project, the technical solution section was divided into nine subcategories: Geotechnical and Earthwork, Pavement, Environmental and Other Permits, Roadway Design and Features, Structure Features, Drainage Design, Traffic Engineering Design, Construction Work Zone Traffic Control and Surveying. Each of these subcategories was outlined with approximately 10-30% design completion in the RFP, and the proposing design-builders were asked to complete the preliminary design for each section. The nine technical subcategories are listed below.

3.1 Geotechnical and Earthwork (100 Points)

The geotechnical and earthwork section was scored based on completion and thoroughness.

- Site investigation approach
- Design approach
- Constructability of geotechnical elements related to shared risk issues
- Long-term performance of geotechnical elements
- Geotechnical QA/QC approach

3.2 Pavement (100 Points)

The pavement section required the proposer to describe its plan to meet the requirements of the scope of work and warranty.

- Site investigation approach
- Design/rehabilitation approach
- Material selection
- Constructability
- Pavement QA/QC approach

3.3 Environmental and Other Permits (30 Points)

Environmental and other permits required the proposing design-builder to describe the way in which the planned to obtain all necessary permits to complete the work, as well as comply with maximum wetland disturbing acreage.

- Understanding of the permits required for the project
- Understanding of the proves for obtaining permits
- Description of anticipated problems and their solutions
- Area of wetlands disturbed by the Proposal; smaller areas of disturbance will receive more points

3.4 Roadway Design and Features (160 Points)

The roadway design and features section was considered one of the most important areas of this project, and the RFP required the proposers to submit detailed design solutions. Safety was an issue that was stressed as vital to being considered a responsive bid; any proposal that did not meet safety requirements or level of service requirements for the design year (2019) was to be considered non-responsive.

- Proposal exceeds WSDOT's standards for safety and mobility
- Proposal meets intent of project
- Design solution meets all vehicle, pedestrian, and bicyclist mobility needs

3.5 Structure Features (100 Points)

Structure features asked the proposers to define the types of bridge structure, retaining wall and noise walls that will be used for the project. Elevation drawings and typicals were required, along with a descriptive narrative of the design approach and construction method to be used to build each type of structure.

- Design approach
- Aesthetic structure designs
- Innovative applications to WSDOT's requirements
- Consideration for efficiency of the maintenance of the structures

3.6 Drainage Design (50 Points)

Items to be addressed in this section included storm water drainage, surface water drainage, and aquatic designated critical habitats. Design solutions regarding soil considerations such as permeability and seepage were also required to be outlined.

- Design approach
- Coordination with city of Vancouver in developing storm water plan
- Project specifics
- Permanent drainage features are maintainable
- Temporary erosion and sediment control
- Innovation

3.7 Traffic Engineering Design (100 Points)

The traffic engineering design section of the RFP asked for a description of the design methodology, construction, and efficiency of the illumination system. An outline of all manuals to be used in both design and construction was also requested.

- Approach to designing and constructing the illumination system
- Approach to designing and constructing the signal system
- Approach to designing and constructing the permanent signing
- Approach to designing and constructing the SC & DI system
- Plan for designing and constructing the temporary illumination and signalization systems

3.8 Construction Work Zone Traffic Control (120 Points)

This section asked for a description of proposed traffic maintenance and control, the methods to be used for designing, implementing and monitoring construction work zone traffic control. Residential access concerns along with staffing requirements were also obligatory.

- Understanding of traffic operations during construction
- Provisions for motorists, pedestrians and bicyclists
- Thoroughness and clarity of the scope
- Staffing and managing traffic control in the construction zones
- Proposed method for notifying authorities of route alterations
- Process to notify EMS services of any closures or delays
- Understanding of local jurisdiction with respect to traffic control
- Approach to maintaining the facility during construction

3.9 Surveying (40 Points)

The surveying section required a description of each proposer's concept for surveying the project, including staking and the methods to be used to acquire additional surveying information.

- Approach to additional surveying for design
- Approach to construction surveying

Phase Two: Data Collection

The three primary sources of input for the final selection phase were the TET and PEB members, the successful proposers and the unsuccessful proposers. All the data was collected in the form of interviews, most of which were one-on-one, the others by telephone conferences. Questionnaire forms and interview questions are located in Appendix A. A list of the interviewees and their contact information are included in Appendices B and C. Individual answers are available upon request.

Phase Two: Lessons Learned & Recommendations

The following is this evaluation team's assessment of the areas in the final selection process that require improvements. In conducting the interviews with the TET, several key issues were mentioned consistently. The concerns most often mentioned were: prescriptive nature of the RFP, communication of design issues, point distribution concerns and the impact of a single point differential, insufficient education and training of the TET and PEB, amount of stipend, use of warranties, TET scheduling, and WSDOT/design-builder interface. Below is a summary of the problem areas, which are accompanied by bulleted ideas and suggestions from this evaluation team to enhance the final selection process.

1. Overly Prescriptive RFP

Members of the TET, PEB and proposing design-builders noted that there was a relatively high level of prescriptive design in the RFP. The high level and prescriptive nature of that design may have inhibited innovative design solutions by the design-builders. A primary advantage of the DB process is the opportunity for competing design-builders to propose constructable and innovative solutions that can save time, save money or add long-term value to the project. The Thurston Way Interchange was originally chosen as a pilot project because of its potential to exploit innovative design solutions to the logistical transportation concerns of the area. Due to either the extended RFP preparation period created by the delay in funding or the existing WSDOT culture, the RFP contained a large amount of prescriptive design.

- Decreasing the amount and prescriptive nature of design in the RFP could result in more creative and effective proposals. By utilizing more performance-oriented criteria in the RFP, WSDOT will increase the chances of owning a more innovative and efficient design solution.

2. Communication of Design Issues

The members of the TET reported that they had some difficulty interpreting various sections of the RFP. Most of the confusion was centered on detailed point allocation, as the RFP left some room for interpretation and sometimes created vague requirements for the design-builders. For those TET members who did not prepare the RFP, there was difficulty interpreting proposals and scoring individual sections.

- Whenever possible, the individuals who are scheduled to perform the technical evaluations of BAFPs should be directly involved in drafting their respective section of the RFP. At a minimum, they should be directly involved with the drafting of the evaluation criteria that the TET will use.

3. Point Distribution and Impact of Scoring Differential

A consistent area of trouble within the final selection phase was the confusion as to how the submittals should be scored. More specifically, what constituted a minimum score for meeting the minimum requirements set forth in the RFP and how much should have been be added when those minimums were exceeded. Along with this, many of the TET members conveyed a lack of understanding regarding the value of a single point when scoring the BAFPs. For example, one single point, given an average score of 500 out of 1000 points, represented approximately $30,000. Therefore, to counteract this one point technical scoring differential, a competing design-builder would need to bid $30,000 less than the company who was awarded the additional point. In essence, one technical point was worth approximately $30,000. This lack of understanding originally led to some rather extreme deviations in scoring. The PEB asked the TET to justify their original point differentials and some of the TETs modified their initial scores given this knowledge of point value.

- First, the point distribution should be provided to TET members and design-builders at a greater level of detail. This will let all stakeholders understand the goals of the project as defined through the value given to the individual technical sections. Second, as previously stated, the TET members should assist in drafting the RFP. This will enhance the point allocation and scoring process. Finally, TET education prior to the start of the evaluation should be enhanced.

4. TET and PEB Education and Training

One of the most potentially detrimental issues that this evaluation team encountered was the insufficiency of TET and PEB training. The training sessions were held several weeks prior to the evaluation of the BAFPs, and the relative level of interest in the training subject matter was low. Since this is the first time through the DB process, this lack of training is understandable.

- First, and most importantly, stress the importance of the training sessions, and heavily encourage participation regardless of experience. Second, hold the training sessions closer to the actual time of evaluation, as many members felt the time elapsed since the training had affected the amount of material they remembered. Finally, hold a separate training session for scoring alone. It would be beneficial to provide sample evaluations of fictitious projects for practice evaluations. As WSDOT gains more experience with DB, these sample evaluations and training can be derived from real projects.

5. Amount of Stipend

A critical area of concern from the proposing design-builders was the amount of the stipend. Initially, the stipend was set at $75,000. After the project was put on hold, then

reinstated, the stipend was decreased to $50,000. The design-builders were very concerned about this decrease. They felt that the amount awarded for the submitted BAFPs was insufficient.

- The evaluators of this report feel that offering an appropriate stipend increases the overall competition of submittals. In ad hoc discussions with the design-build community, the consensus seems to be that in a two-phase process with 3-5 offerors, the stipend should equal approximately one-third (1/3) of the design effort. In fact, stipends can be offered as a reimbursement at one-third (1/3) of the offerors auditable design hours. This level will offset the designers actual costs without decreasing competition. WSDOT should be cautious of simply applying a set percent (i.e. 0.2% of the project cost) because the amount of design effort varies from proposal to proposal. An estimate of actual design effort or the use of auditable hours is the most equitable way to accurately determine stipends.

6. Use of Warranties

Another area of concern relates to the use of warranties. In the Thurston Way Interchange pilot project, feedback from the proposing design-builders indicates that the 5-year pavement warranty outlined in the RFP was achieved by including the cost of an overlay at the end of 5 years. This is very expensive for WSDOT as the design-builders had to assume a cost of asphalt in five years and bid the overlay whether it will be required or not.

- WSDOT should reconsider the use of warranties in conjunction with DB. It is the evaluation team's recommendation that WSDOT experiment with warranties separately. Once WSDOT is satisfied with the use of warranties on their own merit, only then should they consider combining this practice with the DB process.

7. TET Scheduling

The TET members were effectively required to stop working on their current projects entirely, and focus solely on evaluating the BAFPs. This immediate drop of their regular work schedules was seen as burdensome and cumbersome. While many of the members of the TETs were satisfied with the amount of time allocated to complete the evaluations, they felt that dropping everything for a week was difficult. The biggest problem came with those TET members that have customers outside of WSDOT.

- It is imperative that the evaluation period does not change so the evaluation teams can properly plan their work. Taking care to arrange the evaluators' schedules so that their workload allows them to integrate the evaluation of the BAFPs into their regular work rhythm would be less burdensome on the evaluators.

8. Proposer/Design-Builder Interface

One of the most consistently mentioned issues was the communication barrier that existed between the proposing design-builders and WSDOT. Many individuals on both sides of the spectrum would like to have seen more communication available. There was consistent mention on behalf of the design-builders concerning the lack of crucial design

information. They noted that allowing more questions to be asked only serves to enhance the outcome of the project. Considering the liability issues involved with completely opening the lines of communication between the design-builders and WSDOT, a more effective medium may be reached.

- This evaluation team feels that allowing more clarifications for the design-builders only helps the project reach its long-term goal: to obtain the best project. Owner resources must be massed during the proposal stage to quickly and accurately answer questions. Also, the enhanced use of a single point of contact overseeing all questions and answers will ensure the integrity of the process.

The items listed above are recommendations for improving the selection process. Additionally, there were a number of positive issues that the evaluation teams and design-builders noted. These items should be emphasized in subsequent design-build projects.

1. Teamwork

Employing the use of teams when performing the technical evaluations of the BAFPs was seen as one of the strong points in the final selection process. The majority of the TET and PEB team members felt that using a group of professionals to evaluate each section helped in the selection of the best proposal. The diverse backgrounds of the individuals provided unique and alternative perspectives. Beyond the separate technical teams, the use of a more global teamwork approach to the overall evaluation process helped as well. By holding a meeting of all the team members at the end of the first evaluation day, they were able to gain more understanding as to how the evaluation process should work and they were able to adjust scoring methods to achieve better consistency. The interviewees saw this collaboration as a valuable learning experience.

2. TET Review Schedule

WSDOT chose to designate an entire workweek for evaluation of the BAFPs. While having to accommodate this into their schedules, the TET felt that the time allocated for review was sufficient. Some groups used the entire week to complete their evaluations, while some only needed a few days. Regardless, it was seen as a benefit to the selection process to allow adequate time to complete the evaluations in a careful and thorough manner. Had WSDOT not allowed enough time and pushed the TET members to perform these evaluations in less time, the selection process may have been put in jeopardy.

3. Oral Presentations

The majority of the interviewees communicated that the proposer's oral presentations were helpful. From a technical standpoint, they did not offer the TET members much more information than they already had because they were not allowed to ask for any additional information not contained in the BAFP. However, it did allow them to see the amount of enthusiasm and commitment on behalf of the proposing DB teams. While the evaluation teams responded that allowing for more interaction between the design-

builders and WSDOT would have been useful, the overall oral presentations were still a benefit to the selection process.

4. WSDOT Teams

An issue that is much more subjective in nature than the others mentioned above, yet had a profound impact on the outcome of the selection process, was the overall level of professionalism and knowledge on behalf of the TET and PEB teams. It was repeated by a number of interviewees that having evaluators with a high level of experience was a tremendous benefit to the process. They felt that having a group of dedicated and competent individuals was a cornerstone to the execution of this final phase.

5. Website Use

The use of the DB project website and the Internet to display various announcements, new appendices, and other project-oriented literature was seen as a positive attribute to WSDOT's overall approach. This evaluation team feels this type of practice should be encouraged throughout the DB community.

Conclusions

The majority of stakeholders (designers, builders and professionals within WSDOT) believe that DB has a place in the public transportation sector and that WSDOT should participate in DB projects. However, several issues concerning the design-builder selection process were consistently mentioned in both interviews and questionnaires as possible areas of improvement. The issues of concern and suggestions for corrective actions are listed below.

POQ Evaluation Summary

Issue of Concern	Suggested Action
RFQ clarity and interpretation	Focus on RFQ clarity, length, and point weighting for better interpretation
WSDOT/design-builder interface	Increase offeror interaction with WSDOT through a common point of contact
Selection point weighting and scales	Re-evaluate overall point distribution, set minimum acceptable score, and more consistent standard deviations between evaluators
Quality control/quality assurance (QA/QC) requirements	Clarify WSDOT involvement in the QA/QC program
Financial statement requirements	Allow more flexible and region-specific financial statement requirements
Design-builder past performance	Create a DB specific experience database to objectively and consistently evaluate relevant experience
Scoring team experience	Provide consistent training for the diverse set of WSDOT evaluators and only have evaluators score their own area of expertise

BAFP Evaluation Summary

Issue of Concern	Suggested Action
Overly prescriptive RFP requirements may have inhibited innovation in design	Provide the opportunity for more innovation by decreasing prescriptive design in the RFP and increasing the use of performance requirements
Communication of design issues	Allow more opportunity for proposers to ask additional questions and mass WSDOT resources to quickly answer questions during the proposal response period

Issue of Concern	Suggested Action
Point distribution and impact of scoring differential	Publish evaluation point distribution to a greater level of detail and establish a more uniform and transparent system for assigning evaluation points
TET interpretation of RFP	Have TET members write, or carefully review, their respective portions of RFP
TET and PEB education and training	Improve and emphasize importance of training sessions
Amount of stipends	Reward each proposing DB team with 1/3 of the total auditable design hours
Use of warranties	Reconsider pavement warranties as it may not be cost effective on this project
TET scheduling	Organize workload of TET members so that evaluations could be better integrated into their schedules
WSDOT/design-builder interface	Increase offeror interaction with WSDOT through a common point of contact

The stakeholders also consistently noted a number of issues that positively influenced the final selection process.

- The RFP was written with sufficient detail to provide fair comparisons and prevent any submittals from being classified as non-responsive.
- The time allotted for evaluations was adequate.
- The use of teamwork on the TET to review proposals was extremely beneficial.
- The knowledge and experience of TET members was a strong benefit to the process as a whole.

References

Bennett, J., Pothecary, E. and Robinson, G. (1996). *Rep., Design and Building a World Class Industry: Reading Design-Build Forum*, Center for Strategic Studies in Construction, Univ. of Reading, Reading, UK.

"Design-Build: FWHA's Role in the Design-Build Program Under Special Experimental Projects No. 14 (SEP-14)." (1996). U.S. Department of Transportation, Federal Highway Administration, Washington, D.C.

"FHWA Initiatives to Encourage Quality Through Innovative Contracting Practices Special Experimental Projects No. 14 (SEP-14)," (1998). *Rep*., U.S. Department of Transportation, Federal Highway Administration, Washington D.C.

"Project Delivery Systems: CM at Risk, Design-Build, Design-Bid-Build," (1998). *Rep. RS133-1*, Construction Industry Institute, Austin, TX.

Warne, T.R. and Downs, D.G. (1999). "All Eyes on I-15," *Civil Engineering*, 69(10), 42-47.

Appendix A: Data Collection Questionnaires

POQ Evaluation Questions – Non-Respondent Questionnaire
POQ Evaluation Questions – Design-Builder Questionnaire
POQ Evaluation Questions – WSDOT Evaluation Team
BAFP Evaluation Questions – Design-Builder Questionnaire
BAFP Evaluation Questions – WSDOT Evaluation Team

WSDOT Design-Build Program Evaluation

Stakeholder Questionnaire

The Washington State Department of Transportation has contracted the University of Colorado to perform an independent evaluation of the WSDOT Design-Build Pilot Process. The attached questionnaire will facilitate the evaluation of the design-build process.

You have been chosen to participate because your firm showed an interest in the Design-Build process initially, but did not submit a Proposal of Qualifications.

Please take a few minutes to complete this questionnaire, as your comments are critical to the effective evaluation of this Design-Build Pilot Program.

Your responses to this questionnaire will be kept confidential. At no time will your responses be linked to your firm's name. The results of this study will be made available to you upon completion of the analysis. Thank you for your assistance.

Section I: Non-Design-Build Issues

1. Did your company decided not to participate for non-Design-Build related issues, such as:
   - Large backlog of work
   - Projects not in your geographic region
   - Projects outside of your expertise

   ❑ Yes ❑ No

Please explain: _____

_____

_____

_____

If the answer to question 1 was "Yes", please skip to Section IV.

Section II: WSDOT Design-Build Issues

1. Did your firm have enough **time to respond** to the RFQ?

   Non-Issue Needed More Time
   1 2 3 4 5 6

2. Did you anticipate the **organization of the WSDOT Design-Build Program** would not lead to a successful project?

   Non-Issue Too Disorganized
   1 2 3 4 5 6

3. Did your firm feel that the **inexperience of the WSDOT Design-Build Program** would lead to problems with the project?

   Non-Issue Too New
   1 2 3 4 5 6

4. Was the Design-Build process **clearly explained**?

   Non-Issue Confusing
   1 2 3 4 5 6

Section III: Company Design-Build Issues

1. Would the Design-Build process shift too much **project risk** onto your company?

   Non-Issue Too Much Risk
   1 2 3 4 5 6

2. Did your company feel a Design-Build project has a small **potential for profit**?

   Non-Issue Not Profitable
   1 2 3 4 5 6

3. Did your firm have **difficulty finding a partner** to complement your services for a Design-Build project?

   Non-Issue No Partner
   1 2 3 4 5 6

4. Would the **conversion to Design-Build operations** be too difficult/costly for your company at this time?

   Non-Issue Too Difficult
   1 2 3 4 5 6

5. Would your company provide Design-Build services for future projects?

   ❑ Yes ❑ No ❑ Maybe

Please explain_____

_____

6. Other:

   Non-Issue Significant Factor
   1 2 3 4 5 6

7. Other:

   Non-Issue Significant Factor
   1 2 3 4 5 6

SECTION IV. POSITIVE ASPECTS & AREAS OF IMPROVEMENT

Please identify the positive aspects of the Design Build selection process and areas where your experience indicates improvement is needed. For example:

- Best elements of the Design Build Process
- What would have allowed your company to participate in the Design-Build process?
- Explain the changes necessary for your company to participate in future Design-Build Projects.
- Does your company believe WSDOT should engage in Design-Build?

_____

_____

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_____

_____

_____

_____

SECTION V. CORPORATE INFORMATION

Please complete this section so that we may forward the results of this survey.

_____
Your Name

_____
Position/Title

_____
Agency or Company

_____
Department

_____ _____
Street Address or PO Box Suite #

_____ _____ _____ - _____
City State Zip Code

_____ _____ _____
Telephone Number Fax Number E-mail Address

Annual Company Construction Volume $ _____

What type of agency or company are you employed by?

- ❒ Design-Build
- ❒ Architecture/Engineering
- ❒ General Contracting
- ❒ Construction Management
- ❒ Other_____

POQ Evaluation Questions – Design-Builders

1. Did your firm have enough time to respond to the RFQ?
2. Describe the formation/organization of your team, who took the lead?
3. How much time did you spend preparing the POQ?
4. How reasonable were the following POQ evaluation factors?
   - Project Understanding & Approach
   - Design Builder's project team, key personnel and processes
   - Design Builder's past performance
   - Quality control program
   - Safety program
5. Please describe the aspects of the pre-qualification process you found to be most beneficial.
6. How can the pre-qualification process be improved?
7. Does your company believe that WSDOT should engage in DB, are they prepared to?
8. What types of changes will make your company more competitive?
9. Please provide any additional comments.

POQ Evaluation Questions – WSDOT Evaluation Team

1. How many POQ's did you review?
2. How many POQ's did you personally reject as non-responsive?
3. Please describe any trends associated with the POQ's you rejected, i.e. was there an area that was consistently non-responsive?
4. Please rate the amount of time allocated for training.
5. Please rate the security of the POQ evaluation.
6. Please rate the amount of time allocated for review.
7. How reasonable or appropriate were the following evaluation factors (Areas to be evaluated as listed in the RFQ):
   - Project understanding and approach
   - Design-Builder's project team, key personnel and processes
   - Design-Builder's past performance
   - Quality control program
   - Safety program
8. Was the Proposal Evaluation Team able to reach consensus on POQ scores?
9. Please consider the amount of time you spent preparing for the POQ evaluation including time spent reading the RFQ, attending training sessions, reading outside material, etc. How many hours did you spend preparing for the POQ evaluation?
10. Would you want to review another set of POQ's?
11. Would you want to review another set of POQ's using the same procedures?
12. Please describe what worked best in the review process.
13. Now that you have completed a POQ review how can the process be improved?
14. Please provide any additional comments.

BAFP Evaluation Questions – Design-Builders

Section I – General Questions

1. Describe the formation/organization of your team, who took the lead?
2. Did your firm have enough time to respond to the RFP?
3. How much time did you spend preparing the RFP?
4. How reasonable was the stipend?

Section II – Component Specific Questions

These same three questions were asked for each of the technical sections below.

a. Please comment on the clarity of the RFP in this section?
b. (If unclear): How could this section be clarified?
c. Do you feel the number of points assigned to this section was appropriate?

1.0 Management and Organization (100 Points)
2.0 Schedule (100 Points)
3.0 Technical Solutions (800 Points)
- 3.1 Geotechnical and Earthwork (100 Points)
- 3.2 Pavement (100 Points)
- 3.3 Environmental (30 Points)
- 3.4 Roadway Design (160 Points)
- 3.5 Structures (100 Points)
- 3.6 Drainage (50 Points)
- 3.7 Construction Work Zone Traffic Control (120 Points)
- 3.8 Survey (40 Points)

Section III – Final Questions

1. Will your firm pursue another WSDOT design-build project?
2. If your company plans on bidding more DB projects, what types of changes do you see your company making to be more successful in the future?
3. Please describe the aspects of the RFP process you found to be most beneficial?
4. In what ways can the RFP process be improved?
5. Do you think that the point distribution spread was appropriate? If you could have seen any change in the distribution, what would that be?
6. Do you have any additional comments?

BAFP Evaluation Questions – WSDOT Evaluation Team

Section I – General Questions

1. Please rate/discuss the amount of time allocated for training.
2. Please rate/discuss the amount of time allocated for BAFP review.
3. Please comment on any security issues in the BAFP process.
4. Please rate/discuss the usefulness of the oral interviews.

Section II – Component Specific Questions

1. What specific (technical or PEB) component did you review?
2. How reasonable or appropriate were the evaluation factors?
3. Please describe any trends associated with the proposals that you reviewed, i.e. was there an area that was consistently non-responsive?
4. Was your (TET/PEB) team able to reach consensus on the final scores?

Section III – Final Questions

1. Please consider the amount of time you spent preparing for the BAFP evaluation including time spent reading the RFP, attending training sessions, reading outside material, etc. How many hours did you spend preparing for the BAFP evaluation?
2. Would you want to review another set of BAFPs?
3. Would you want to review another set of BAFPs using the same procedures?
4. Please describe what worked best in the review process.
5. Now that you have completed a BAFP review how can the process be improved?
6. Please provide any additional comments.

Appendix B: Design-Builder Interview Participants

Design-Build Teams Interviewed

Teams not Short-Listed

1. Atkinson Construction & Berger/Abam Engineers
   Ken Dickson & Bob Adams Phone: (425) 255-7551

2. Hamilton Construction Company & URS Corporation
   Dave Place Phone: (541) 746-2426

3. Scarsella Brothers, Inc. & Harding ESE, Inc
   Bob Scarsella Phone: (253) 872-7173

Teams Short-Listed

1. Kiewit Construction Company & Sverdrup Civil, Inc
   Gordon Schwiesow Phone: (360) 693-1478

2. F.E. Ward & David Evans and Associates
   Ted Adlan Phone: (360) 573-8929

3. Kuney Construction Company & Entranco Engineers
   Max Kuney Phone: (509) 535-0651

Appendix C: WSDOT Interview Participants

WSDOT Proposal Evaluation Board Members

Alternative Project Delivery Manager *Jeff Carpenter*	Phone: (360) 705-7804
Southwest Region Design Engineer *Bart Gernhart*	Phone: (360) 905-2012
Southwest Region Construction Engineer *Doug Ficco*	Phone: (360) 905-2023
Project Manager *Amy Revis*	Phone: (360) 577-2230
Federal Highway Administration Representative *Michael Kulbacki*	Phone: (360) 753-9556

WSDOT Technical Evaluation Team Members

Construction Administration *Wayne Hoppen*	Phone: (360) 905-2015
Environmental *Becky Michaliszyn*	Phone (360) 905-2174
Schedule *Amy Revis*	Phone: (360) 577-2230
Construction Traffic *Stan Markuson*	Phone: (360) 905-2241
Geotechnical *Tony Allen*	Phone: (360) 709-5450
Structures *Munindra Talukdar*	Phone: (360) 705-7752
Design Admin. *Chris Christopher*	Phone: (360) 577-2230

Maintainability *Steve Canter*	Phone: (360) 905-2130
Surveying *Neil Fancis*	Phone: (360) 905-2070
Roadway Design *Dave Bellinger*	Phone: (360) 905-2190
Materials/Pavement *Linda Pierce*	Phone: (360) 709-5470
Traffic Design *Stan Markuson*	Phone: (360) 905-2241
Drainage/Stormwater *Chad Hancock*	Phone: (360) 750-7091
Public Relations *Linda Mullen*	Phone: (206) 440-4704
Utilities *Tom Swafford*	Phone: (360) 905-2299

Appendix D: BAFP Final Evaluation Scoring Matrix

Technical Evaluation

Evaluation Section	F.E. Ward	Kiewit	Kuney
Environmental (Possible = 30)	19	7	15
Survey (Possible = 40)	21.6	20.7	19.1
Structures (Possible = 100)	46	54	49
Geotech (Possible = 100)	55.5	70	58.5
Staging (Possible = 120)	74	65.5	59
Traffic (Possible = 100)	50	43.5	44.5
Roadway Design (Possible = 160)	79.5	76	93
Management & Organization (Possible = 100)	53.1	49.5	50.8
Drainage (Possible = 50)	29.75	22.3	30.9
Pavement (Possible = 100)	51	41	51
Schedule (Possible = 100)	52.6	44.5	49.5
	532.05	494.00	520.30

Best Value Score

Component	F.E. Ward	Kiewit	**Kuney**
Technical Score	532.05	494.00	**520.30**
Lump Sum Bid Price	$24,232,197	$22,731,000	**$22,725,000**
Best Value Score *(Technical Score x 10,000,000) / (Lump Sum Bid Price)*	219.56	217.32	**228.95**